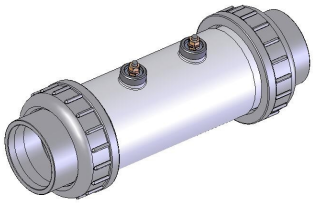
# USER MANUAL

SALTWATER CHLORINATOR/PH REGULATOR



FAMILY POOLS

Ref.: PAPI004041-GB-REV.02/08

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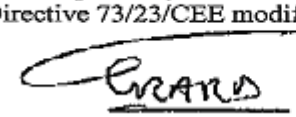
Pool Technologies declares this equipment complies with the following E.U. directives:
- Electromagnetic Compatibility Directive 89/336/EEC modified 92/31/EEC and 93/68/EEC
- Low Voltage Directive 73/23/CEE modified 93/68/EEC

Chief Executive:



***To improve product quality, the manufacturer reserves the right to change the characteristics of its products at any time without prior notice.***

# I. SAFETY INSTRUCTIONS

*** READ AND FOLLOW ALL INSTRUCTIONS**
*** SAVE ALL INSTRUCTIONS**

**In the manual this symbol indicates a WARNING.**
**It informs you of the risk of damage to the equipment or serious injury to humans. It is very IMPORTANT that you pay attention to these warnings!**

## WARNING - RISK OF ELECTRIC SHOCK

**The safety instructions outlined in this manual are all inclusive. They highlight the most common risks of using electrical equipment in the presence of water. Any installation and use of this equipment should be carried out with caution and common sense.**

**To prevent injuries or accidents, install the equipment out of reach of children.**

**Ensure that the installation complies with the regulations in force in the country of installation. The pump timer power supply line should be protected by a differential circuit breaker with a tripping safety device of 30 mA maximum, with a contact opening distance of at least 3 mm on all poles. This device is completely different from the differential circuit breaker protecting the whole house, which has a rating of about 300 to 500 mA. In case of doubt, get a qualified electrician to check your whole installation area installation. Installation of this equipment should be performed by a qualified person in accordance with the electrical standards in force in the country of installation.**

**The power supply cables and the cell must be protected against accidental damage. A damaged cable should be replaced immediately with an original cable exclusively. Never cut or extend the cables.**

**It is important to turn off the power supply before carrying out any technical operation on the equipment. Do not modify the device. Any modification may damage the equipment or endanger human life. Only qualified personnel should carry out maintenance or repairs in case of breakdown.**

**This device is intended for use in family pools only.**

**NON-OBSERVANCE OF THESE INSTRUCTIONS MAY CAUSE DAMAGE TO THE DEVICE OR SERIOUS INJURY**

# II. PACKING LIST

Before starting installation, ensure the box contains:

- ✓ 1 User manual
- ✓ 1 Controller with 1 cell power cable
- ✓ 1 Chlorination cell with 2 nuts, 2 collars and two 63/50 mm reducers
- ✓ 1 Water low/salt/temperature sensor
- ✓ 1 Accessories holder provided with a Ground kit and one 1/2" plug
- ✓ 1 pH probe
- ✓ 1 pH 7 control solution and 1 pH 10 solution
- ✓ 1 Salt and water hardness analysis kit
- ✓ 1 Spare tubing (peristaltic pump)
- ✓ 1 Kit comprising:
  - 5 m of semi-rigid tubing
  - 1 Suction strainer
  - 1 Injection connector, dia. ½''
  - 1 Roll of Teflon Tape
  - 1 Mounting kit (screw anchors, screws and insulating washers)

**With model 300, the following are also supplied:**

- ✓ 1 Secondary controller with 1 cable for servo control by the main controller
- ✓ 1 Chlorination cell with 2 nuts, 2 collars, two 63/50 mm reducers and a power cable.

# III. INSTALLATION

**The present manual concerns the following peristaltic pump or electromagnetic pump versions.**

- **Model 35 for pools up to 35 $m^3$**
- **Model 55 for pools up to 55 $m^3$**
- **Model 95 for pools up to 95 $m^3$**
- **Model 160 for pools up to 160 $m^3$**
- **Model 300 for pools up to 300 $m^3$ (electromagnetic pump version only)**

# A – INTRODUCTION

Before proceeding with installation of the device, it is very important to check the following points:

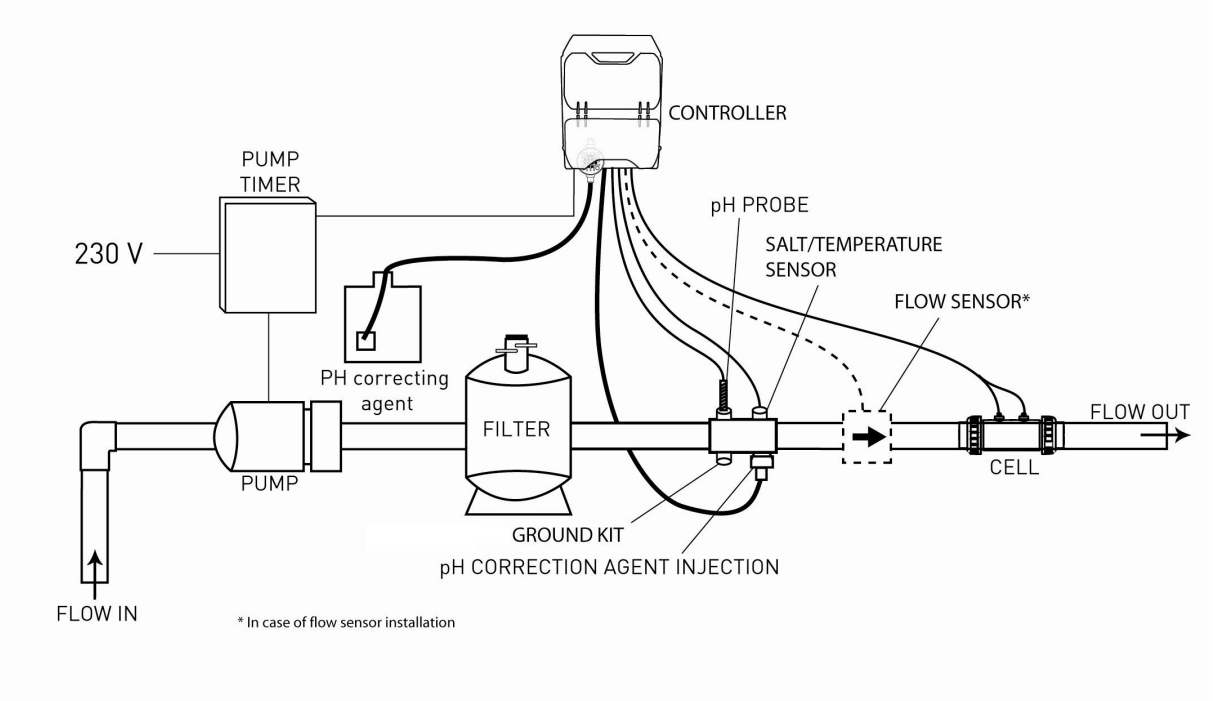
- ✓ Ensure that all of the hydraulic equipment is in good working order and is correctly sized. In particular, check the delivery of the filtration pump, the capacity of the filter and the diameter of the tubings.

- ✓ The maximum pressure of the water in the cell must not exceed 3 bars.

- ✓ The device's treatment capacity should be appropriate for the volume of water to be treated and for the climate of the location in which it is installed. A device which is designed to treat a volume of 100 $m^3$ in a temperate climate should be limited to an 80 $m^3$ family pool in a hot climate or when using well water.

- ✓ The installation area should be dry and properly ventilated, protected from rain, splashes, water spray and UV radiation. Ensure that the pH corrector product container is kept in a place sufficiently remote from any electrical equipment and any other chemical product. Failure to comply with this instruction will lead to abnormal oxidation of the metallic parts which could result in a complete breakdown of the device.

- ✓ Assembly of the controller and the chlorination cell must be performed strictly in compliance with the following layout diagram:



# B - INSTRUCTIONS

## 1 - Controller

✓ Choose a location that is easily accessible, close to the pump timer. Install the controller vertically, far enough away from the pool to comply with the regulatory distance in force in your country. Use the mounting kit supplied. Do not cover it, and allow air to circulate between the rear of the controller and the wall.

Any contact between the controller and the pool water may cause an electric shock.

✓ The controller must be permanently connected to the pump timer and servo controlled by the pump timer. **Do not use an extension cord. Do not plug the device into an electric power outlet.** Turn off the differential circuit breaker beforehand. Ensure that the controller switches off when the filtration pump stops

## 2 – Accessories holder

✓ Install the accessories holder after all other treatment, cleaning or heating equipment in the middle of a horizontal tubing of minimum length 40 cm. The arrow shows the direction of water flow and must be visible on top. In the case of a 50 mm dia. tubing, glue a 63/50 mm reducer at the suction end. The link between the accessories holder and the chlorination cell can remain at dia. 63 mm.

## 3 - Chlorination cell

✓ Install the chlorination cell after the accessories holder, positioning it for your convenience. If necessary glue a dia. 63/50 mm reducer at the discharge end.

Wait until all the glue joints are completely dry before restoring pressure in the tubings.

✓ Fit the chlorination cell waterproof seals using a little silicone grease. Tighten the nuts by hand.

✓ Connect the cell supply cable to the controller. Position the terminals, the lock washers and then the nuts, in that order. The terminals can be positioned on either pole. Tighten the upper nut gently to avoid creating an irreversible leak at the connection level.

## 4 - Accessories

a) Water low/salt/temperature sensor

✓ Mount the water low/salt/temperature sensor and tighten by hand. No Teflon Tape is needed.

b) pH probe

- ✓ Remove the rubber protector and mount the probe on the accessories holder with Teflon Tape. Make sure it is not stuck in the tubing.
- ✓ Connect the cable of the pH probe (BNC plug) to the base of the controller. Keep it away from all other electric cables to avoid any electromagnetic disturbance which could distort the measurements.

c) Injection connector

- ✓ Mount the ½ '' injection connector on the accessories holder with Teflon Tape.

d) pH pump

- ✓ Connect the suction strainer to the pH pump with part of the supplied tubing. Comply with the direction of the arrows on the pH pump cover.
- ✓ Connect the outlet of the pH pump to the injection connector with the remainder of the supplied tubing.

e) Ground kit

The electrode of the Ground kit can remove to earth the static electricity in the pool water, wherever it may have come from. In certain situations, static electricity can lead to abnormal oxidation of the metallic parts which are in contact with the water in the pool.

- ✓ Fit the hydraulic earth electrode on the accessories holder, tightening by hand. No Teflon is needed.
- ✓ Connect the electrode to an ground rod (not supplied), complying with the specifications of the installation standards in force in your country on the day of installation.
- ✓ Tighten the upper nut of the electrode while holding the lower nut with a flat spanner to avoid creating an irreversible leak at the connection level.

# IV. ACTIVATION

## A – INTRODUCTION

When installing the device for the first time or at the start of a new season, it is imperative to check and correct the following 7 points:

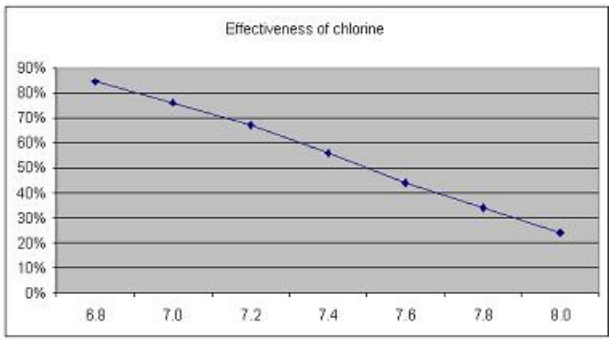
✓ The water temperature must be above 15°C.

✓ The pool water must be clear and free from algae and sediments.

✓ The water should be correctly balanced (Alkalinity, Total Hardness):
- Alkalinity is a measure of the level of bicarbonates dissolved in the water.
- Total Hardness is a measure of the water's hardness, i.e. the level of calcium or magnesium salts dissolved in the water.

✓ The pH of the water should be stabilised between 7.0 and 7.2.

WARNING: Whatever the system of chemical treatment, the effectiveness of chlorine decreases very rapidly as the pH increases, and scale precipitates more quickly when the pH level is high or unstable.




*Source: French Ministry of Health*

- ✓ Filters and primary filters must be clean and used in accordance with the manufacturer's specifications.

- ✓ The level of stabilising agent should be less than 50 ppm. The role of the stabilising agent or isocyanuric acid is to protect the chlorine from the effects of UV. A level that is too high will impede the disinfectant effect of the chlorine produced by the device. To bring down the level of stabiliser in your pool, follow the recommendations of your professional.
- ✓ The free chlorine level of the pool should be greater than or equal to 1 ppm.

Do not use stabilising agent in the case of an installation with a chlorine probe.

Before using any pool caulking product, remove the pH probe from the accessories holder.

ATTENTION: The cell's lifetime is very dependent on compliance with the rules mentioned above, especially with regard to a water temperature > 15°C, a stable pH around 7.0/7.2, and a satisfactory alkalinity, total hardness and level of stabilising agent.

Preferably use water from the public water supply. Avoid using any water from natural sources (rain, runoff water, reservoirs, wells). If you do use water from a natural source, have it analysed beforehand and ensure that it complies with drinking water standards, and if necessary carry out appropriate treatment.

# B - INSTRUCTIONS

## 1 – Salt chlorination

- ✓ Before starting up, carry out a shock treatment on the pool water with a product free of stabiliser.

- ✓ Before starting up, carry out a shock treatment on the pool water with a product free of stabiliser.

- ✓ Spread in the pool the quantity of salt needed to reach a level of 5 kg/$m^3$. The salt used should be of standard quality, in pellet or granular form, such as that recommended for water softeners. It is not necessary to use stabilised salt.

| VOLUME ($m^3$) | 35 | 55 | 95 | 160 | 300 |
|---|---|---|---|---|---|
| SALT (kg) | 175 | 275 | 475 | 800 | 1500 |

NB: The theoretical time for the volume of water in the pool to circulate through the filter is an essential factor for water quality. Make sure that it does not exceed 6 hours (to calculate this, divide the volume of the pool by the filtration pump delivery).

- ✓ Set the pump timer to "MANUAL" position.

- ✓ Then place the device on standby until complete dissolution of the salt (from a few hours to 24 h), by pressing key C for 3 seconds.

- ✓ After the salt has dissolved completely, restart the device by pressing key C for 3 seconds: the screen comes on.

- ✓ When you first start up the device, a choice of languages will be proposed to you. Select the desired language with the ❨ ❩ keys and confirm by pressing OK.
  Subsequently, read and obey the welcome messages appearing on screen whenever you restart the device.

- ✓ Check the salt level with the salt test strip supplied. Adjust the salt level displayed as described in section V.B.3.

- ✓ Measure the free chlorine level in the pool with your usual analysis kit. The free chlorine should be greater than 1.5 ppm.
  **If the free chlorine is less than 1.5 ppm**, set the device to 100% position and let it operate continuously. After it has run for a while, check the free chlorine level in the pool again with the analysis kit. If it is still less than 1.5 ppm, extend the filtration period on MANUAL until a sufficient concentration has been reached (from several hours to several days).

- ✓ When the chlorine level exceeds 1.5 ppm, set filtration to "AUTO".

- ✓ Measure the water's hardness (total hardness) with the hardness test strip supplied.

✓ Determine the optimum polarity reversal time for the cell according to the following table:

| Hardness (ppm)* | 0 | 50 | 120 | 200 | 400 | 1000 |
|---|---|---|---|---|---|---|
| Time (hours) | 24 | 18 | 12 | 6 | 3 | - |

* For a total hardness value in °f, divide by 10

NB:

For a total hardness value greater than 400 ppm, the water in your pool will have to be treated. For this purpose use hardness reducer product.

✓ The reversal time for your device is set to 6 hours by default. If you observe that the measured hardness does not correspond to this range, contact your professional to adjust the reversal time.
A reversal time appropriate to the water's hardness can extend the life of the chlorination cell and optimise your equipment's performance.

✓ Then adjust the filtration time according to the table below. In the event of a localised increase in pollution, filter round-the-clock.

| Temperature (°C) | Time (hours) | Temperature (°C) | Time (hours) |
|---|---|---|---|
| 16 | 8 | 26 | 13 |
| 18 | 9 | 28 | 16 |
| 20 | 10 | 30 | 19 |
| 22 | 11 | Higher | 24/24 |
| 24 | 12 | | |

✓ Adjust the production % to maintain the level of free chlorine in the pool at between 1 and 1.5 ppm. Several attempts will be needed to determine the value which best suits your situation. For a 50 m3 pool, using Model 95, you could start with 50% initially.

## 2 – pH regulation

Prime the pH pump as described in Section V.B.3.
The pH probe has been calibrated in the factory, so it does not have to be calibrated again when the device is started for the first time. Calibration of the pH probe should then be done on a yearly basis, at the start of the swimming season. Refer to Section V.B.5.
To optimise the operation of your system, we advise you to enter the pool volume in the parameters. Contact a professional.

Your equipment is now operational. Don't hesitate to activate your warranty online on http://www.pool-technologie.fr/.
This will enable you to receive any new information that could be of interest to you.

# V. OPERATION

Never use hydrochloric acid. Use only a pH corrector product (acid or base) which is recommended by your professional. The use of any other chemical product could cause irreversible damage to the device.

When pH corrector product is added directly to the pool, it is essential to distribute it evenly around the flow out.

In the case of an installation with chlorine option, the chlorine option goes to safety configuration upon detection of a pH < 6.0. It is reactivated automatically as soon as the pH rises to a value > 6 again.

It is IMPERATIVE to check the levels of chlorine and pH each week with your usual analysis kit. An excessive chlorine level and/or a low pH tends to cause oxidation on all metallic parts and can lead to irreversible deterioration of the pool lining, automatic cover pins and slats, telescopic shelters and heat exchangers. If you cover the pool (shelter, tarpaulin, cover), ventilate the pool regularly to prevent dissolved gases accumulating, since these could disturb the measurements of the pH or chlorine probes. The manufacturer may not be held liable in the event of failure to comply with these operating instructions.

## A - BASIC FUNCTIONS

### 1 – Start/Stop

To stop or restart a function:

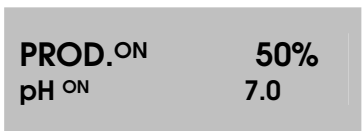
- ✓ Press key C for 3 seconds.

Your device allows you to carry out various operations detailed below. Key **C** also allows you to stop an operation in progress and return to the main menu.

### 2 - Parameters displayed

The main screen displays the production percentage and the pH in the pool.

Main screen




- ✓ With the ❨ ❩ keys, adjust the chlorine production percentage so as to maintain the free chlorine level in the pool between 1 and 1.5 ppm.

✓ Press ⇦ or ⇨ or the direct access keys to scroll the following parameters:

**WATER TEMPERATURE** Indicates the pool water temperature.

**FILTRATION TIME** Indicates the recommended time to obtain optimum treatment. Comply with these indications.

**SALT LEVEL** Indicates the salinity of the pool water.

✓ The main screen also shows the status of the functions:

| STATUS CODE | MEANING |
|---|---|
| ON | The function in question is activated |
| OFF | The function in question has been deactivated |
| PROD | Chlorination is in production mode |
| STOP | An alarm has placed the function in question in safety configuration |
| INV | Polarity reversal of the chlorination cell. |
| INJ | The pH pump injects the corrector product |
| | The "Clock" mode has been activated by your professional |

# B – ADVANCED FUNCTIONS

To obtain access to the advanced functions, simply press the OK key for 5 seconds.

## SALT CHLORINATION

1 - BOOST mode

Allows super-chlorination of the swimming pool in the event of exceptionally high occupancy, abundant rain, turbid water or any other factor entailing an increased need of chlorine. This function automatically sets disinfectant production to 100% for a period of 24 hours irrespective of the daily filtration time.

✓ Press the OK key for 5 seconds and then select BOOST mode with the ⇦ or ⇨ keys or by the direct access key.
✓ Press the OK key to start BOOST mode.

The C key can be used to halt BOOST mode at any time. The BOOST mode is not available if production is at 0%.

The BOOST mode is a preventive and not a curative mode!

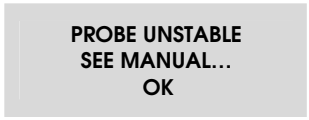
It cannot replace a conventional shock treatment in the case of pool water that is unfit for bathing.

2 – Adjusting the salt level

The natural properties of water vary from one pool to another and even over time. To obtain a precise measurement of salinity, the salt probe must be adjusted at installation and after each reactivation at the start of the season.

To perform adjustment, comply with the following procedure:

- ✓ Measure the salt level in the pool with a salt test strip.
- ✓ Press the OK button for 5 seconds.
- ✓ Select the Salt Adjustment function with the ⇦ or ⇨ keys and confirm by pressing OK.
- ✓ Select the salt level measured beforehand with the ↑ and ↓ keys and then start adjustment by pressing OK. An hour glass shows you that the operation is in progress.
- ✓ At the end of the procedure, the following message indicates whether the operation has succeeded or failed:




- ✓ Press OK to store the adjustment in memory. To return to the main screen, press C several times.
- ✓ In the event of failure, press OK and start the procedure again. In the event of a second failure, contact your professional.

# pH REGULATION

3 - Manual injection

Manual injection of pH corrector product can be used to correct the pool pH level or to prime the pH pump when replacing the product container.

- ✓ Press the OK button for 5 seconds.
- ✓ Select the INJECTION function with the ⇦ or ⇨ keys and confirm by pressing OK.
- ✓ You can change the injection time according to your needs with the ↑ and ↓ keys. Confirm by pressing OK.
- ✓ The countdown is started. You can suspend or resume the countdown by pressing OK
- ✓ At the end of the countdown, the device automatically goes to regulation mode.

4- Adjusting the pH probe

This function allows the device to display the pH value you have measured in your pool manually. *This function is no longer available after installing the chlorine probe option.*

- ✓ Press the OK button for 5 seconds.
- ✓ Select the pH PROBE function with the ⇦ or ⇨ keys and confirm by pressing OK.
- ✓ Select the pH **adjustment** function with the ⇦ or ⇨ keys and then confirm by pressing OK.
- ✓ The "Refer to User Manual" message appears for 5 seconds.
- ✓ The "Select Value" message appears.
- ✓ With the ↑ ↓ keys enter the value measured in the pool manually and confirm by pressing OK to start adjustment.

✓ At the end of the procedure, the following message indicates whether the operation has succeeded or failed:

| ADJUSTMENT SUCCESSFUL<br><br>OK | PROBE UNSTABLE<br>CALIBRATE PROBE<br>OK |
|---|---|

✓ Press OK to store the adjustment in memory. To return to the main screen, press C several times.

✓ In the event of failure, or if despite the adjustment you observe a major difference between the pH value measured in the pool with your usual analysis kit and the value displayed by the device, press OK and perform calibration of the pH probe as explained in the following section.

**The measurement of pH by colorimetric methods (photometer or measuring kit) using phenol red is distorted in the presence of salt water. We recommend that you use a calibrated pH meter.**

5 - Calibration of the pH probe

Each pH probe has its own characteristics. To obtain satisfactory pH regulation, it is recommended that the pH probe be calibrated at the start of the season and after any change to the pH probe.

✓ Take the pH7 and pH10 control solutions.

✓ Remove the pH probe from the accessories holder and stop up with the ½ ''dia. plug.

✓ Press the OK key for 5 seconds and select PH PROBE; confirm by pressing OK.

✓ Select the CALIBRATION function with the ⇦ or ⇨ keys, then confirm by pressing OK.

✓ Scrupulously follow the instructions appearing on screen.

✓ At the end of the procedure, the following message indicates whether the operation has succeeded or failed:

| CALIBRATION SUCCESSFUL<br><br>OK | PROBE UNSTABLE<br>SEE MANUAL...<br>OK |
|---|---|

✓ Press OK to store the calibration in memory. To return to the main screen, press C several times.

✓ In the event of calibration failure, start the procedure again.
In the event of a second failure, call your professional. You may need to replace your pH probe. While waiting for installation of the new pH probe, the device proposes to you a DOSING mode which will enable you to keep a satisfactory pH level in your pool. In this mode, the device will inject each day a fixed dose of pH corrector product, calculated based on the consumption in the days preceding calibration. The word "DOSING" appears on the main screen. Only a successful calibration or deactivation of the pH function by a professional can make it possible to exit this mode.

The calibration solutions are disposable. They can be kept for 1 year in their sealed packet stored away from light and heat. Throw away after use.

Never dry the pH probe with a cloth or absorbent paper, since this could damage it. Leave it to drip dry.

## C - OTHER ADVANCED FUNCTIONS

1 – Annual reactivation

For reactivation of the combined saltwater chlorinator/pH regulator at the start of each season, a number of operations described in Section IV must be performed.
However, the "Activation" menu facilitates your task by guiding you step-by-step.

- ✓ Press the OK button for 5 seconds.
- ✓ Select the "Activation" menu with the ⇦ or ⇨ keys and confirm by pressing OK.
- ✓ Use the arrows and the OK key to answer the questions asked.
- ✓ At the end of the procedure, the following message indicates successful activation:

REACTIVATION OK
PLACE FILTRATION
ON AUTO
OK

Press OK. To return to the main screen, press C several times.

2 - Choice of language

This function allows you to have messages displayed in the language you have selected.

- ✓ Press the OK button for 5 seconds.
- ✓ Select LANGUAGE.
- ✓ Select the desired language with the ⇧ ⇩ keys and confirm by pressing OK.

3 - Audible alarm

By default, the audible alarm is deactivated. This function allows you to activate the audible alarm.

- ✓ Press the OK button for 5 seconds.
- ✓ Select ALARM.
- ✓ Select ON with the ⇧ ⇩ keys and confirm by pressing OK.
- ✓ The visual alarms are still activated.

4 - Professional menu and options

Your professional is able to obtain access to the menu dedicated for his use. This menu contains advanced functionalities which will enable him to optimise the performance of your device.

Moreover, your professional can set the available options for you:
a) Free Chlorine option
Thanks to its revolutionary technology, the chlorine probe (ref.: OPT05POO0001) measures directly the free chlorine contained in your pool. With this option, your device becomes fully automatic. This function can be installed later.

b) Automatic cover function

This option (2 versions: ref. OPT04POO0001 and OPT04POO0003) allows the device to be connected to the automatic cover. It allows the production of disinfectant to be adapted automatically depending on the position of the automatic cover or a switch.

c) Separate flow sensor
The flow sensor (ref.: OPT07POO0002) can detect the presence of a flow in the tubings. Detection of no flow in the tubings will immediately stop the production of disinfectant.

d) Empty container sensor
The empty container sensor automatically detects a lack of pH corrector product in the container.

# VI. ALARMS

- ✓ Whenever an alarm is tripped, a message appears on screen to specify the alarm type. It is accompanied by an audible alarm if the function is activated.

- ✓ If a problem is detected, the function in question is stopped (STOP). The function is reactivated (ON) as soon as the fault disappears.

| ALARMS | CAUSES / SOLUTIONS |
|---|---|
| LACK OF WATER / NO FLOW | The device has detected a lack of water in the tubings.<br>**Chlorine PRODUCTION and pH REGULATION are suspended.**<br>Check the entire hydraulic circuit of the pump timer and the water level in the pool. |
| SALT LOW | The device has detected a salinity < 2.5 kg/$m^3$.<br>**Chlorine PRODUCTION is suspended.**<br>Add up to 5 kg/$m^3$ of salt, and the device will start again automatically.<br>Adjust the salt probe if necessary. |
| LOW WATER TEMP. | The device has detected a water temperature < 15°C.<br>**Chlorine PRODUCTION is suspended.**<br>The water temperature is too low. Stop the device or have the Chlorination function deactivated by your professional. |
| pH LOW | The device has detected a pH < 6.5 (if pH set point value at 7.0).<br>**pH REGULATION is suspended.**<br>Check the pH value in the pool.<br>If the pH is low, add pH base corrector directly in the pool, at the discharge nozzles.<br>If the pH is normal, calibrate the pH probe. |
| pH HIGH | The device has detected a pH > 7.5 (if pH set point value at 7.0).<br>**pH REGULATION is not suspended.**<br>Check the pH value in the pool.<br>If the pH is high, add pH acid corrector directly in the pool, at the discharge nozzles.<br>If the pH is normal, calibrate the pH probe. |

| | |
|---|---|
| pH REGULATION | The device has detected that the most recent attempts to correct the pH around the set point value have been unsuccessful.<br>**pH REGULATION is suspended.**<br>Check that the pH corrector container is not empty.<br>Check that the pH pump is injecting correctly.<br>Check that the rubber protection on the pH probe has been removed.<br>Check that the pH probe is operating correctly.<br>Check the injection and suction valves. |
| EMPTY CONTAINER<br>(option) | Detects that the pH corrector container is empty when the "Empty container" option is installed.<br>**pH REGULATION is suspended.**<br>Replace the pH corrector container, taking the necessary safety precautions. |
| pH STOP ??? | No calibration of the pH probe has been validated.<br>**pH REGULATION is suspended.**<br>Calibrate the pH probe. |
| CELL CURRENT | The device has detected a power supply fault on the cell.<br>**Chlorine PRODUCTION is not suspended.**<br>Check that the cell is not coated with scale.<br>Check the electrical connections of the cell and pump timer. |
| FILTRATION LOW | The device has detected a filtration time far less than the recommended filtration time.<br>**No function is suspended.**<br>Increase the filtration time. |
| FLOW<br>(option) | Detects a lack of sufficient flow in the tubings when the "Flow" option is installed.<br>**Chlorine PRODUCTION and pH REGULATION are suspended.**<br>Check the entire hydraulic circuit of the pump timer. |

If, despite the checks, the problem persists, contact your professional. The device is provided with a protected diagnostic aid menu reserved for professionals. It enables them to determine the cause of the problem on the spot.
For all assistance, consult the FAQs on http://www.pool-technologie.fr/. If you do not find an answer to your problem, post us your message via our website or contact your professional. You can also contact our After Sales Service Department:

INDIGO No. 0 892 705 520 (from France)
€0.34 incl. VAT/min.

Please supply:
- ✓ Proof of purchase.
- ✓ Serial number of the controller, the cell and the pH probe.
- ✓ Date when the device was installed.
- ✓ Name of the professional who sold and/or installed the equipment.
- ✓ Salinity, pH, chlorine level, water temperature, stabiliser level, pool volume, daily filtration time.

# VII. WINTERING

When the water temperature is less than 15°C, the low water temperature alarm will be actuated and will automatically stop production of the disinfectant. Stop the device by pressing key C for 3 seconds.

When wintering the pool (emptying the pool and/or stopping filtration), it is essential to stop the device. Then carry out the following maintenance operations:

- ✓ Remove the pH probe and store it in the rubber protector filled with drinking water.
- ✓ Rinse the entire pH corrector circuit with fresh water.

**Changing the pump hose:**
Each season, replace the peristaltic pump tubing and the check valves. The maintenance kit (ref. KIT05MAINQUA or KIT02MAINMTP) contains all the parts necessary for annual maintenance operations.

**Cleaning the cell**
In most cases, the cell's auto-cleaning function prevents deposits of scale. However, in regions in which the water is particularly hard, manual cleaning of the cell may be necessary from time to time. In that case proceed as follows:

- ✓ Stop the device and the pump timer; close the cell shutoff valves.
- ✓ Loosen the cell's electrical connections.
- ✓ Loosen the cell's union nuts.
- ✓ Remove the cell and check for the presence of scale on the electrodes.
- ✓ To descale the cell, use the pH acid corrector or a solution of hydrochloric acid diluted at a rate of 1 volume of acid added to 4 volumes of water. Always add the acid to the water and never the opposite. Leave the cell to soak until the scale disappears completely, without rubbing the electrodes and without submerging the connection plugs.
- ✓ Rinse the cell and then reassemble it.
- ✓ Open the cell shutoff valve; restart the pump timer and the device.

# VIII. WARRANTY

All our care and technical expertise has gone into making this device. It has undergone quality control procedures. If, despite all the care and knowledge which has gone in to its manufacture, you had to use our warranty, free replacement only applies to parts of our equipment which are defective (excluding transport).

## 1 - Warranty period

**2 YEARS*** for **new equipment** (cubicle + original cell + pH probe).
**1 YEAR*** for **replacement cells and probes.**
**1 MONTH*** for **After Sales Repair** and **spare parts.**

** Authentic invoice date.*

## 2 - Scope of warranty

The warranty applies to all parts except wear parts, which must be replaced regularly.
The device is covered for any manufacturing fault only when it has been used normally in a family pool. Use in public pools voids the warranty.

## 3 - After Sales Service

- ✓ All repairs are done in our workshop.
  All return transport costs are payable by the user. No compensation will be paid for downtime and loss of enjoyment of the equipment when it is being repaired.
- ✓ In all cases, the equipment is always transported at the cost and risks of the user. Before accepting delivery, it is up to the user to check that the equipment is in perfect condition and if necessary to state any reservations on the carrier's transport slip. Confirm this to the carrier within 72 hours by registered letter with acknowledgement of receipt.

**IMPORTANT: A replacement under warranty will in no case extend the initial warranty.**

## 4 - Limits of warranty

*The warranty does not cover:*

1. Equipment and labour provided by a third party for installation of the equipment.
2. Damage caused by nonconforming installation.
3. Problems caused by an alteration, accident, mistreatment, negligence of the professional or the end user, unauthorised repairs, fire, floods, lightening, frost, armed conflict or any other case of force majeure.

**NB: The warranty does not cover any equipment damaged due to failure to comply with the safety, installation, operation and maintenance instructions set out in the present manual.**

Every year we improve our products and software. These new versions are compatible with the prior models. New hardware and software versions cannot be covered by the warranty on the previous models.

## 5 - Application of the warranty

- ✓ For more information on the current warranty get in touch with a professional or our After Sales Service Department. All requests should be accompanied by a copy of proof of purchase.
- ✓ When you buy your equipment, don't hesitate to activate your warranty online on http://www.pool-technologie.fr/. This will enable you to receive any new information that could be of interest to you.
- ✓ No part will be replaced unless the defective part has been returned beforehand. Any part which is not returned will be charged based on the current price list.

## 6 - Laws and disputes

- ✓ The present warranty is subject to French law and all other European directives or international treaties which are in force at the time of the claim and which are applicable in France. Should any dispute arise concerning the interpretation or execution of the warranty, sole jurisdiction is assigned to the Tribunal de Grande Instance (High Court) of Montpellier.

# IX. PROTECTING THE ENVIRONMENT

Protecting the environment is essential. For our company this is a strong commitment.

Our products are designed and manufactured with materials and components which are of high quality, environmentally friendly, reusable and recyclable. However, the various parts of which they are formed may not be biodegradable.

European environmental directives set, for each product category, appropriate methods for managing and disposing of waste material. The aim is to reduce and recycle wastes, to prevent their components from becoming a danger and to encourage re-use of the products.

The symbol stamped on a product means that selective collection is necessary and that it must be sorted from other household waste.

Therefore, you must not discard our product by simply throwing it away anywhere.

* You may deposit it in a waste collection centre.
* If you buy a similar device, you may leave the old one with your seller at the time of purchase.

Manufactured by:
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